SPORT PSYCHOLOGY: OPTIMAL PERFORMANCE IN A PARALYMPIC SETTING

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• Post Master Applied Sport Psychology
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• National Boccia Classifier
RYAN COCKBILL

29 years old
Spinal cord injury at age 16
Shooting since 2010
First Paralympic games 2012
SH2
R4 R5 R9
<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Spinal Cord Injury</th>
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<tbody>
<tr>
<td>Physiological</td>
<td>- Blood pressure</td>
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<td>- Spasticity</td>
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<td>- Endurance</td>
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<td>- Strength</td>
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<td>- Contractures</td>
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<td>- Decubitus</td>
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<td>- Osteoporosis</td>
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<td>- Obesities</td>
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<td>- Phantom sensations</td>
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<td>- Sensation (body awareness)</td>
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<td>- Fatigue / energy</td>
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<td>- Heart and respiration</td>
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<td>Sensory</td>
<td>- Loss of sensation</td>
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<td>- Balance</td>
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<td>- Eye sight</td>
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<td>- Heat / cold</td>
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<td>Psychological</td>
<td>- Overcompensation</td>
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<td>- Assertiveness</td>
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<td>- Interpersonal skills</td>
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<td>- Emotion regulation</td>
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<td>- Self- overestimation</td>
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TRANSLATION INTO SHOOTING

- Requirements of the sport
- Characteristics of the disability
- Characteristics of the athlete
- Coachability/Learning mechanisms
BASIC CONCEPTS

SHOOTING

- Aiming sports
- Fine motor skills
- Body awareness
FINE MOTOR SKILLS

Decrease of control & sensation ~ changes under pressure

Change of routines; the only non measurable item in shooting is the trigger

Explicit: Coach

Implicit: Sport Psychologist
FINE MOTOR SKILLS: EXERCISE EXAMPLE

First step: Translate the explicit into the wordings of the athlete

**Visualization script:**

**Start:**
It is the final... I'm sitting in my chair and look around the venue and see Mike bringing my equipment. While he comes walking up to me I feel relaxed and ready for the final. I've prepared myself and feel confident.

I hear the noises of others talking, shooting and materials... I smell the fresh air... and the... While I'm sitting I feel the back of my foot, tension in my chest and neck. The thought of the final shot pops into my head. Will I make it? Will I shoot it? How will the others do? As soon as I think about this I feel some concern and start thinking about myself.

I look at Mike and I see the tension on his face, his smile and in his words: I stay silent and keep the focus on myself and how I want things to go.

**The final preparations:**
The coach leaves me and I sit alone. I'm not looking next to me but I sense the presence of my opponents. I hear the speaker and at the meantime I hear other things... my body feels... and the thoughts I have are... My actions are...  

**The final:**
The shots are beginning and the first one was good... 'I got this' I think. And I feel comfortable and confident. This is how I like it to go and I'm in control. My body...  
During the breaks I sit still... focus on my plan and have the time to think about what went well. I feel...

**The process:**

1. I made it! I came second and am ready now for the final shots. I stayed in control the whole time and felt good. But now something else happens... I start thinking about losing and winning... the disappointment and the horrible feeling of failing. 'I want to do well and I want to show the others how good I am. But I haven't won in so long!' The shots start and I feel that my thoughts are different than before. I can't feel my body as good and the focus goes to my fingers and lower arms. Instead of my core I don't want my heart rate to incline. There comes the trigger... my finger... my aim... everything I didn't want to happen is starting and I can't stop... the thought I have are... and the feeling it gives me is...

2. I made it! I came second and am ready now for the final shots. I stayed in control the whole time and felt good. I feel good and enjoy this moment... I'm looking to the fire point and know that I will perform the best I can. My body feels at rest and I keep a slow breathing. Looking around I know how many times I have been in this situation and how much fun it goes. I smile and think of how I want to feel when I will shoot for the final shot. The relaxation and the confidence. That is what I do.
BODY AWARENESS

• High Body awareness improves performance under pressure (Larson, 2016)

• Under pressure increase of muscular tension (Stress response)
• Pain
• Breathing changes
• Heartbeat sensation
BODY AWARENESS
EXERCISE EXAMPLE: THE PYRAMID

What is the assignment?
Athletes are shooting individually. The pyramid is an indication of the time. They all release one shot after a specific amount of time:
- 30 seconds
- 1 minute
- 2 minutes
- 2.30 minute
- 3 minutes
- 4 minutes

The goal is to learn how to use the most effective routine after a different amounts of pause time. Athletes have to hold position but can move.

Write down after the exercise what worked well to hold position and what interfered.

What do you learn from this exercise?
• Relaxing in position
• Breathing into position
• Preparation to shoot
• Boredom vs focus
• Understanding time (feeling time)
• Flexibility in routines
• Concentration endurance

What will be evaluated?
• Concentration
• Position
• Feeling of pressure and thoughts

What information do I need?
• Cock/timer
• Reflectional skills
• Notebook
• Knowledge about breathing
Requirements

- Time & Equipment
- Matches & Events
- Coaches & staff
COLLABORATION

Athlete

Sport psychologist

Coach

Assistant

Sport psychologist

Athlete

Coach
Thanks to: British Shooting Staff & Athletes